

Remarks

Claims 1-32 are pending in the application. Claims 7-9, 3, 14, and 26-32 are withdrawn from consideration. Claims 1-6, 10-12 and 15-25 are rejected.

Objections to Claims 3, 4, 6, 10-12, 15-16, 19, and 23-24

Claim 3 was objected for reciting organic carboxylic acids as pentanoic and hexanoic, rather than pentanoic acid and hexanoic acid. Claim 3 has been amended to correct this matter.

Claims 4, 6, 10-12, 15-16, 19, and 23-24 were objected to for shortening the term “organic carboxylic acid” to “organic acid.” Claims 4, 6, 10-12, 15-16, 19, and 23-24 have been amended to resolve this matter.

Rejections under 35 U.S.C. §112

Claims 1-2, 11-12, 19-22 and 25 stand objected to under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2, 11-12, 19-22 stand rejected because they depend from claim 1, and thus incorporate its limitation. Claim 15 was rejected as being indefinite.

Claim 1 was rejected as being indefinite in view of the listing of diethylamine within a grouping of carboxylic acids. Claim 1 has been amended to recite diethylamine salicylate, the originally intended amine salt of an organic carboxylic acid originally intended instead of diethylamine. Support for the amendment of claim 1 can be found at paragraph 21 and Table 13 where the salt was referred to as diethylamine salicylic acid or diethylamine salicylate.

Claims 2, 11-12, 19-22, and 25 were rejected as depending on a rejected claim and should now be allowable in view of the amendment made to claim 1.

Claim 15 was rejected as being indefinite in view of uncertainty as to the organic carboxylic acids included in the original claim language. Claim 15 has been amended to specifically designate which organic carboxylic acids are included. Because claim 15 now requires a specific subset of the organic carboxylic acids which are monocarboxylic acids and which are designated in claim 1, no new matter has been added.

Rejections under 35 U.S.C. §102(b)

(a) Claims 1, 3-4, 15, 17-18, 20 and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by WO 91/13552 to Tate. Applicant respectfully submits that the Office Action failed to establish a prima facie case of anticipation because Tate lacks at least one element, the

at least one emulsifier, required by Applicant's claim 1 and each of the dependent claims. Tate's compositions do not include an emulsifier, nor are they necessary because he teaches that his formulations generally involve solutions. At page 6, last full paragraph, Tate discusses the problems avoided by only including soluble components.

(b) Claims 1, 3-5, 15, 18, 20 and 25 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,143, 718 to Shalom, B.D. For the same reason noted above for the rejection based on Tate, the Office Action has failed to establish a prima facie case of anticipation. Like the Tate reference, Bar-Shalom does not teach any formulations having at least one emulsifier. Each of the claims rejected as being anticipated by Bar-Shalom require at least one emulsifier.

Rejections under 35 U.S.C. §103(a)

Claims 1-6, 10-12 and 15-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,246,716 to Sedun et. al, in view of U.S. Patent No. 5,741,502 to Roberts, J.R. Applicant respectfully submits that the Office Action has failed to establish a prima facie case of obviousness and had the prima facie case of obviousness been established it would be overcome by the unexpected and surprising synergistic activity provided by fungicides containing the both a fatty acid component and an organic carboxylic acid component.

(a) Motivation of one skilled in the art to make the combination is lacking

The Office Action has suggested that it would have been obvious for one skilled in the art to add a buffering agent such as a carboxylic acid (Roberts) to a fatty acid fungicidal composition containing a fatty acid (Sedum). Robert's teaching is directed to nonaqueous adjuvant compositions with buffering capability. Looking at Robert's teaching, his adjuvant is designed for adding to a pesticide formulation in order to "...regulate pH to avoid hydrolysis of pesticides that tend to decompose in alkaline spray solutions." (column 2, lines 11-13) At column 2, lines 51-54, Roberts teaches that "(e)ven after the addition of alkaline water and pesticides, use of this composition reduces and/or maintains the pH of the spray mixture within a desired range to prevent hydrolysis of the pesticide." At column 5, lines 3-5, Roberts indicates that "(h)owever, a buffering agent is not required if the surfactant or oil can provide the properties to reduce the pH to below about 7."

One skilled in the art would understand the kind of pesticide which would benefit from the addition of a buffer to reduce the pH of the pesticide. For example, pesticides having ester groups, carbamate groups, thiophosphate esters, and the like might be subject to hydrolysis under alkaline conditions. However, one skilled in the art looking at a formulation containing a fatty acid or its salt would find no reason to add an additional carboxylic acid to buffer the solution. Carboxylic acids and their salts are generally stable in the presence of a base under the conditions most pesticides are applied. In fact the common method for making a salt of a carboxylic acid is to add a basic hydroxide, carbonate, and the like to the carboxylic acid. Even if a formulation containing a fatty acid were unstable, Roberts suggests that no buffer is needed for compositions having a pH of 7 or below. Although the Office action states that one skilled in the art would add Robert's "carboxylic acid" to Sedum's "fatty acid formulation" to buffer the formulation, no reason has been provided as to why buffering is needed or why it might be desired. As a result, a prima facie case for obviousness based on Sedum in view of Roberts has been established.

(b) Had a prima facie case of obviousness been presented, the showing of an unexpected synergistic effect overcomes the obviousness rejection

Applicant's combination of a fatty acid and a different carboxylic acid defined in claim 1 has provided unexpected superior fungicidal properties compared to a fatty acid alone or a carboxylic acid alone. Comparison data is provided, in Tables 4-7 and 9, that demonstrates that the combination of a fatty acid (caprylic acid) and another carboxylic acid (glycolic acid) provide substantially greater protection against a common fungus than the fatty acid alone or the carboxylic acid alone. This superior efficacy demonstrated in Applicant's specification is believed to overcome a prima facie case of obviousness, had one been provided.

It should be understood that the above remarks are not intended to provide an exhaustive basis for patentability or concede the basis for the rejections in the Office Action, but are simply provided to overcome the rejections made in the Office Action in the most expedient fashion.

Claims 1-6, 10-12 and 15-25 are currently pending in this application and have been rejected for the reasons discussed above. In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is requested to allow claims 1-6, 10-12, and 15-25 and pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the undersigned representative by telephone.

Respectfully submitted,

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